We Claim:

1. A communications system, comprising:

a plurality of ground base stations, each ground base station being connected to at least one end-user communications device; and

a suborbital platform carrying a communications device, wherein the plurality of ground base stations and the communications device are configured to maintain a plurality of communications signals, each communication signal linking the communications device to at least one of the plurality of ground base stations.

2. The communications system of claim 1, wherein at least one of the plurality of ground base stations includes a wireless local loop, the wireless local loop establishing communication between the at least one of the plurality of ground base stations and at least one subscriber remote station, the at least one of the plurality of ground base stations linking the wireless local loop communications with the communications signal between the at least one of the plurality of ground base stations and the communications device.

3. The communication system of claim 2, wherein the at least one subscriber remote station is two or more cordless telephones, each cordless telephone being used by a subscriber not affiliated with the building housing the at least one of the plurality of ground base stations.

4. The communication system of claim 1, wherein the communications device is carried by an airplane configured to stay aloft without refueling for at least 200 hours.

5. The communication system of claim 1, wherein the communications device is carried by an airplane configured to stay aloft without refueling for at least 3000 hours.

6. A method of maintaining a communications link between a ground station and a suborbital platform, wherein the ground station communicates using an antenna that provides a communication signal of limited beamwidth, comprising:

positioning the suborbital platform and antenna such that the suborbital platform is within the beamwidth of the antenna's signal;

maintaining the antenna in a generally fixed location; and

flying the suborbital platform in a pattern that maintains the suborbital platform within the beamwidth of the signal.

7. The method of claim 6, wherein the airplane is substantially maintained within a station delimited by a 4000-foot diameter circle and a 100-foot altitude range.

8. The method of claim 6, wherein the step of flying is continued for at least 200 hours.

9. The method of claim 6, wherein the step of flying is continued for at least 3000 hours.

10. The method of claim 6, wherein the suborbital platform is an airplane.

11. A communications system for communicating between a satellite and a ground station, comprising:

a downward-pointing communications antenna on the satellite, the downward-pointing antenna having a limited signal beam-width;

an upward-pointing communications antenna on the ground station, the upward-pointing antenna having a limited signal beam-width, wherein the downward-pointing antenna and the upward-pointing antenna are aimed such that they delimit a region of airspace that is within both signal beam-widths; and

a suborbital platform configured to fly a pattern entirely within the delimited region of airspace.

12. The communication system of claim 11, wherein the suborbital platform is substantially maintained within a station delimited by a 4000-foot diameter circle and a 100-foot altitude range.

13. A communication system for providing communications between a ground station and a spacecraft in geosynchronous orbit, the ground station and the spacecraft having communications systems that are characterized by operating with given beamwidths, comprising:

a suborbital platform maintained at a non-equatorial latitude that prevents the ground station from being within the beamwidth of communication signals transmitted by the spacecraft toward the suborbital platform, and that prevents the spacecraft from being within the beamwidth of communication signals transmitted by the ground station toward the suborbital platform

14. The communication system of claim 13, wherein the suborbital platform is configured to operate for at least 200 hours.

15. The communication system of claim 13, wherein the suborbital platform is configured to operate for at least 3000 hours.

16. The communication system of claim 13, wherein the suborbital platform is configured to maintain the airplane within a station delimited by a 4000-foot diameter circle and a 100-foot altitude range.

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17. A communication apparatus for communicating data between a terrestrial gateway and a plurality of terrestrial terminals, comprising:

an airplane; and

a network carried by the airplane, and having at least three downward-pointing communication devices, each communication device defining a beamwidth for communication, the communication devices' beamwidths delimiting distinct terrestrial communication cells that include the terminals when the airplane is aloft in a predetermined station;

wherein the network is configured to maintain a communications signal carrying the data with the gateway; and

wherein the communications devices are configured to route the data carried by the communication signal between the network and the plurality of terminals.

18. The communications system of claim 17, wherein:

the network is configured to maintain additional communications signals carrying additional data with additional gateways; and

the communications devices are further configured to route the data carried by the additional communication signals between the network and the plurality of terminals.

19. The communications system of claim 17, wherein the communications device is carried by an airplane configured to stay aloft without refueling for at least 200 hours.

20. The communications system of claim 17, wherein the communications device is carried by an airplane configured to stay aloft without refueling for at least 3000 hours.

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21. The communications system of claim 17, wherein each terminal has a terminal antenna configured for carrying the communication signal, the terminal antenna being configured such that the airplane's entire station falls within the terminal antenna's beamwidth without any adjustment of the terminal antenna's aim.

22. The communications system of claim 21, wherein the terminal antenna includes no active tracking mechanism.

23. A communication system for communicating data between one or more data sources and a plurality of terrestrial terminals, comprising:

a plurality of airplanes;

a plurality of networks, each airplane carrying a network, each network having at least three downward-pointing communication devices, each communication device defining a beamwidth for communication, the communication devices' beamwidths delimiting distinct terrestrial communication cells that include the terminals when the airplane is aloft in a predetermined station; and

one or more gateways in communication with the one or more data sources, wherein each network is configured to maintain one or more communications signals carrying the data with one or more gateways;

wherein each communications device is configured to route data carried by its respective network's one or more communication signals between its respective network and one or more of the plurality of terminals.

24. The communications system of claim 23, wherein the plurality of airplanes include a first airplane and a second airplane, each airplane being located in a station outside of the beamwidths of the communication signals between the terminals and communication devices in other airplanes.

25. The communications system of claim 24, wherein the first airplane and the second airplane each include communications devices that are configured to communicate with one or more of the same communication cells.

26. The communications system of claim 23, wherein each airplane is configured to stay aloft without refueling for at least 200 hours.

27. The communications system of claim 23, wherein each airplane is configured to stay aloft without refueling for at least 3000 hours.

Sub a1

28. The communications system of claim 23, wherein each terminal has a terminal antenna is configured such that the airplane's entire station falls within the terminal antenna's beamwidth without any adjustment of the terminal antenna's aim.

29. The communications system of claim 28, wherein the terminal antenna includes no active tracking mechanism.